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AUTHOR Gottfried, Adele E.; Gottfried, Allen W.  
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## ABSTRACT

This study investigated the relationship between parents' reward strategies for children's school performance and children's intrinsic academic motivation, achievement, and classroom functioning. Nine-year-olds (N=107) were given tests that measured motivation and achievement (the Children's Academic Intrinsic Motivation Inventory and the Woodcock-Johnson Tests of Achievement). Mothers completed a survey concerning reward strategies they used when their children did well or poorly in school tasks. Teachers completed the teacher's version of the Achenbach Child Behavior Checklist. Reward strategies emphasizing children's competence were positively related to motivation. Children who received more praise showed higher achievement. Reward strategies emphasizing extrinsic rewards or devaluation of competence were negatively related to motivation and achievement. These strategies were also associated with more school behavior problems and less effective learning. A list of seven references is included. (BC)

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PARENTS' REWARD STRATEGIES AND CHILDREN'S  
ACADEMIC INTRINSIC MOTIVATION AND SCHOOL PERFORMANCE

Adele E. Gottfried

California State University, Northridge

Department of Educational Psychology

Allen W. Gottfried

California State University, Fullerton

Department of Psychology

Paper presented at the Biennial Meeting of the Society for  
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Adele E. Gottfried

Allen W. Gottfried

ABSTRACT

This research investigated the hypothesis that parents' reward strategies for children's school performance are significantly related to children's academic intrinsic motivation, achievement, and classroom functioning. Reward strategies emphasizing children's competence were predicted to be positively related, and strategies emphasizing extrinsic rewards or devaluation of competence were predicted to be negatively related to motivation and performance. One hundred seven 9-year old children's motivation, achievement, and school behavioral functioning were assessed. Mothers completed a survey concerning reward strategies they use when their children do well and poorly in school tasks. Teachers completed the teacher's version of the Child Behavior Checklist concerning children's school functioning. Children were administered the Children's Academic Intrinsic Motivation Inventory and the Woodcock-Johnson Tests of Achievement to measure motivation and achievement, respectively. Results supported the hypotheses and provided ecologically valid evidence for theories regarding the relationships between rewards, academic intrinsic motivation, and school performance.

Parents' Reward Strategies and Children's Academic  
Intrinsic Motivation and School Performance

Adele Eskeles Gottfried

California State University, Northridge

Allen W. Gottfried

California State University, Fullerton

Academic intrinsic motivation concerns enjoyment of school learning and an orientation to master challenging tasks. It is positively related to children's achievement and effective school functioning across the elementary and junior high school years (Gottfried, 1985, 1990). How parents respond to and reward children's school performance is an environmental factor which can be expected to influence motivation and children's school functioning. This issue has ecological validity because parents often recognize and/or reward their children's positive performance, and perhaps provide corrective feedback or sanctions for poorer performance. This issue also has theoretical importance. Experimental studies have indicated that provision of external rewards may, in some instances, reduce intrinsic motivation (Deci & Ryan, 1985). However, rewards focusing on children's competence, such as praise, either have positive effects or no negative effects on children's intrinsic motivation (Anderson, Manoogian, & Resnick, 1976).

Heretofore, there has been no prior research investigating the relation between parental reward strategies and children's academic intrinsic motivation. Further, the role of parental reward strategies on children's school performance (achievement,

classroom behavioral functioning) was also studied to determine if parental responses would relate to actual school effectiveness as well as motivation. It was hypothesized that when parents' reward strategies emphasize competence, such as praise, stronger motivation, and more effective school performance would result. Conversely, reward strategies emphasizing extrinsic tangible rewards (e.g., money, toys), or feedback devaluing children's competence were expected to be deleterious to motivation and performance.

Subjects were 107 children participating in an ongoing longitudinal study of development (Gottfried, Gottfried, & Bathurst, 1988). This study reports on the evaluation at age 9 when a broad variety of academic and parental measures were obtained. In a university laboratory children were administered the Children's Academic Intrinsic Motivation Inventory (CAIMI) (Gottfried, 1986), and Woodcock-Johnson Psycho-Educational Battery to measure achievement. Mothers completed a school survey in which they rated (from 1=Rarely through 6=Always) the degree to which they used specific reward strategies when their child did well and did not do well in school. Teachers completed the Achenbach Child Behavior Checklist assessing school behavior problems, achievement, and other relevant classroom behaviors. The measures are described in Tables 1 and 2.

The hypotheses were supported. Pearson correlations (Tables 3, 4, and 5) indicated that extrinsic reward strategies and devaluation of children's competence were consistently and negatively related to motivation and achievement. These

strategies were also associated with more school behavior problems and less effective learning. Parents' praise when children did well, and encouragement of children's efforts when they did poorly were positively related to motivation, and children who received more praise also showed higher achievement. An interesting finding indicated that children who were encouraged to do more work after they had done well at a task showed lower motivation (math), lower achievement, lower levels of school functioning, and more school behavior problems. Children may perceive the suggestion to do more work as a pressure, rather than an encouragement, with concomitant deleterious effects on motivation, achievement, and school functioning. Similarly, the admonition that children can do better after they had done poorly at a task did not have a positive relationship to motivation and performance. Rather, children may perceive this as a devaluation of their efforts. Virtually all strategies subsequent to a poor academic performance were inversely related to motivation and performance, with the single exception of being told to try harder which was positively related to social studies motivation. Perhaps this is related to the attribution that future effort can be helpful, and hence may have less deleterious effects on children's motivation and performance.

These findings provide ecologically valid support for theories indicating that recognition of competence enhances intrinsic motivation and school performance, while provision of extrinsic rewards, and devaluation of competence, appear to be

deleterious (Dweck & Legget, 1988). Children's interpretations of parental statements are speculated to be the mediators between reward strategies on the one hand and the children's motivation and school functioning on the other. To generalize further, children who do poorly at tasks more frequently are likely to receive parental strategies which result in negative outcomes as they are less likely to receive praise, the only strategy with more consistently positive outcomes.

Whereas the present results are correlational, they are consistent with findings of experimental studies (Deci & Ryan, 1985). Hence, it is suggested that parental reward strategies influence children's academic intrinsic motivation, as well as achievement and school behavioral functioning. Perhaps parental reward strategies can be modified to focus more on praising children's competencies, even in the face of an unsuccessful performance, and reduce the provision of extrinsic rewards and statements interpreted by children as criticisms or demands.

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TABLE 1  
PARENTAL REWARD STRATEGIES

When my child does well in school, I usually:

1. Praise him/her
2. Reward him/her with a privilege
3. Reward him/her with a toy
4. Reward him/her with a learning material
5. Reward him/her with money
6. Provide new materials in that area
7. Encourage child to do more work in that area

When my child does not do well on a school task, I usually:

8. Encourage him/her to try harder
9. Tell child he/she can do better
10. Take away a privilege
11. Get angry or show displeasure
12. Provide home activities in that area

Note. All items were responded to on the basis of a 6-point Likert scale ranging from Rarely (1) to Always (6).

TABLE 2

MOTIVATION, ACHIEVEMENT, AND SCHOOL FUNCTIONING MEASURES

Motivation

Children's Academic Intrinsic Motivation Inventory (CAIMI)  
Subscales in: Reading, Math, Social Studies, Science, School  
in General (CAIMI-R; CAIMI-M; CAIMI-SS; CAIMI-SC; CAIMI-G).

Achievement

Woodcock-Johnson: Reading, Math (WJR; WJM)

Teacher Version of Child Behavior Checklist: Ratings of  
academic performance in Reading and Math. (TRR; TRM)  
Ratings range from Far below Grade Level (1) to  
Far Above Grade Level (5)

School Functioning

Teacher Version of Child Behavior Checklist: Ratings of  
children's behavioral functioning compared to typical  
pupils of the same age:

How hard is he/she working? (HW)

How appropriately is he/she behaving? (BEH)

How much is he/she learning? (LRN)

How happy is he/she? (HAP)

Ratings range from Much Less (1) to Much More (7).

Total Behavior Problems--Teacher (TPROB)

TABLE 3  
CORRELATIONS BETWEEN PARENTAL REWARD STRATEGIES AND  
CHILDREN'S ACADEMIC INTRINSIC MOTIVATION

Reward Strategies	Motivation (CAIMI)				
<u>Child Does Well:</u>	R	M	SS	SC	G
Praise				21*	
Privilege		-21*			-21*
Toy		-27**	-18*	-28**	-27**
Learning Material			-17*		
Money		-16*		-17*	-17*
New Materials					
Do more work		-18*			
<u>Child Does Poorly:</u>					
Try Harder			20*		
Do Better		-21*		-18*	
Remove Privilege		-21*		-26**	-22*
Show Anger		-20*			
Home Activities				21*	

Note. Refer to Table 2 for abbreviations. Decimals omitted.

N = 103

\*  $p < .05$

\*\*  $p < .01$

TABLE 4  
CORRELATIONS BETWEEN PARENTAL REWARD STRATEGIES AND  
CHILDREN'S ACHIEVEMENT

Reward Strategies	Achievement			
<u>Child Does Well:</u>	WJR	WJM	TRR	TRM
Praise	22**		22*	
Privilege	-23**	-28**	-23*	-27**
Toy		-16*		-26**
Learning Material		-20*		-23*
Money	-21*		-35***	-34***
New Materials			-22*	
Do more work	-25**		-23*	-22*
<u>Child Does Poorly:</u>				
Try Harder				
Do Better	-18*		-27**	-20*
Remove Privilege			-26**	-24*
Show Anger			-30**	-34***
Home Activities				

Note. Refer to Table 2 for abbreviations. Decimals omitted.

N = 103 for WJR and WJM; N = 83 to 85 for TRR and TRM

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

TABLE 5  
CORRELATIONS BETWEEN PARENTAL REWARD STRATEGIES AND  
CHILDREN'S SCHOOL FUNCTIONING

Reward Strategies	Functioning /				
<u>Child Does Well:</u>	HW	BEH	LRN	HAP	TPROB
Praise					
Privilege		-22*	-26**	-19*	25*
Toy		-19*	-27**		30**
Learning Material		-24*		-22*	30**
Money	-20*	-18*	-32**	-23**	26**
New Materials		-19*	-20*		26**
Do more work		-20*	-21*		
<u>Child Does Poorly:</u>					
Try Harder					
Do Better	-38***	-40***	-38***	-22*	31**
Remove Privilege	-33***	-35***	-37***	-33***	
Show Anger	-40***	-32***	-37***	-23*	18*
Home Activities					

Note. Refer to Table 2 for abbreviations. Decimals omitted.

N = 82 to 85

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$